

Report Documentation Page

Form Approved
OMB No. 0704-0188

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE 2012	2. REPORT TYPE N/A	3. DATES COVERED -	
4. TITLE AND SUBTITLE Shelf-Slope Physical/Biological Response to Monsoonal Wind Forcing and Riverine Inflow - 4D Sampling with Towed Profilers and Autonomous Gliders Off Vietnam		5a. CONTRACT NUMBER	
		5b. GRANT NUMBER	
		5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)		5d. PROJECT NUMBER	
		5e. TASK NUMBER	
		5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey CA 93943		8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSOR/MONITOR'S ACRONYM(S)	
		11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release, distribution unlimited			
13. SUPPLEMENTARY NOTES			
14. ABSTRACT			
15. SUBJECT TERMS			
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	SAR
			18. NUMBER OF PAGES 2
			19a. NAME OF RESPONSIBLE PERSON

Shelf-Slope Physical/Biological Response to Monsoonal Wind Forcing and Riverine Inflow - 4D Sampling with Towed Profilers and Autonomous Gliders Off Vietnam

Emmanuel Boss
School of Marine Sciences
5706 Aubert Hall
University Of Maine
Orono, Maine, USA 04469-5706
phone: (207) 581-4378 fax: (207) 581-4388 email: emmanuel.boss@maine.edu
<http://misclab.umeoce.maine.edu/index.php>

Grant Number: N000141210103

LONG-TERM GOALS

To develop improved predictive capabilities for the distribution of particulate and dissolved materials in the open and the coastal ocean.

OBJECTIVES

To study the dynamics of absorbing and scattering materials in the South China Sea and its response to physical forcings, namely the monsoon, river inputs and topography.

Link in-situ measurements with remote sensing to be able to constrain parameter values and processes using remote observations.

APPROACH

We propose an observational program using ship-based towed profiling, long-endurance gliders and floats focused on:

1. Processes that govern circulation and biological variability over the shelf and slope, including the interplay between monsoonal wind forcing, freshwater input and topography.
2. Mechanisms that drive cross-slope exchange and communication between the Vietnam shelf and interior South China Sea.
3. The potential use of remotely sensed ocean color for characterizing circulation over the shelf and slope.

WORK COMPLETED

We have purchased two profiling floats through a DURIP (see below) that will be deployed as part of the observational program. We have completed no other work to date as we are waiting for the plans of the observational program to be finalized.

IMPACT/APPLICATIONS

This project will provide data necessary to understand how physical forcing, particularly that associated with the monsoon, affects the distribution of particulate and dissolved materials in the South China Sea. Understanding those dynamics are necessary to devise models able to predict the fate of such materials.

RELATED PROJECTS

As mentioned above profiling floats purchased through a DURIP grant (N000141010776) will be used as part of this project.

This work is in collaboration with Drs. Craig Lee and Burt Jones who are funded under the same DRI.